

## SC18MNX MBP Compressor R290 115V 60Hz

### General

Code number	104H7870
Approvals	UL984
Compressors on pallet	80

### Application

Application	MBP			
Frequency   Motor type	Hz	60   CSR	60   CSIR	
Evaporating temperature	°F	-10 to 45	-10 to 45	
Voltage range	V	95 - 135	103 - 135	
Max. condensing temperature continuous (short)	°F	131 (149)	131 (149)	
Max. winding temperature continuous (short)	°F	257 (275)	257 (275)	

### Cooling requirements

Frequency   Motor type	Hz	60   CSR			60   CSIR		
Application		LBP	MBP	HBP	LBP	MBP	HBP
90°F		-	F <sub>2</sub>	-	-	F <sub>2</sub>	-
100°F		-	F <sub>2</sub>	-	-	F <sub>2</sub>	-
110°F		-	-	-	-	-	-
Remarks on application:							

### Motor

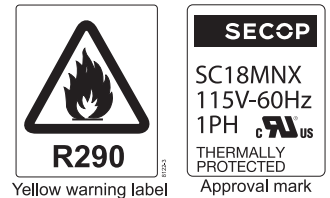
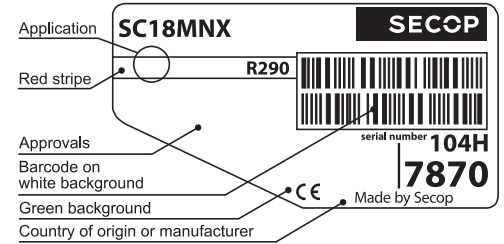
Motor type	CSIR/CSR		
LRA (rated after 4 sec. UL984), HST   LST	A	64.0	-
Cut in Current, HST   LST	A	64.0	-
Resistance, main   start winding (77°F)	Ω	0.6	3.0

### Design

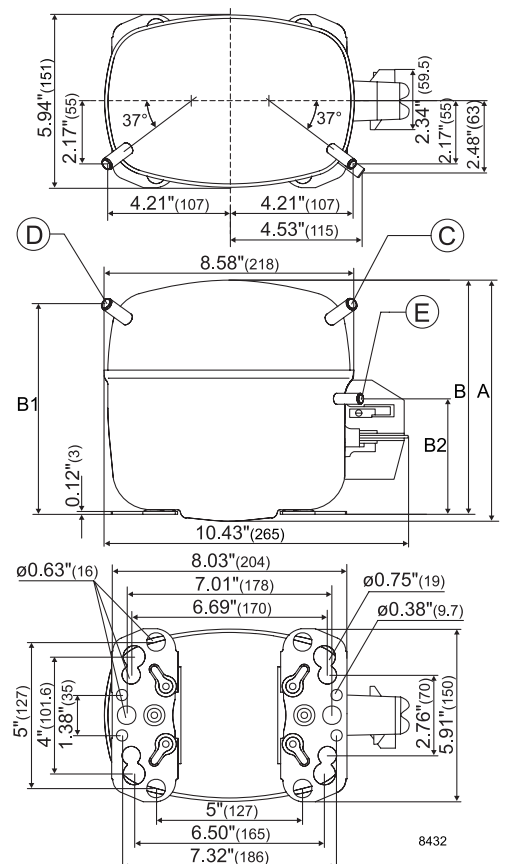
Displacement	cu.in	1.10
Oil quantity (type)	fl.oz.	18.6 (polyolester)
Maximum refrigerant charge	oz.	5.3
Free gas volume in compressor	fl.oz.	49.4
Weight without electrical equipment	lbs.	31.3

### Dimensions

Height	inch	A	8.62
		B	8.39
		B1	7.60
		B2	4.33
Suction connector	location, I.D. in.   angle	C	0.378-0.385   37°
	material   comment		Copper   Rubber plug
Process connector	location, I.D. in.   angle	D	0.252-0.259   37°
	material   comment		Copper   Rubber plug
Discharge connector	location, I.D. in.   angle	E	0.252-0.259   37°
	material   comment		Copper   Rubber plug
Oil cooler connector	location, I.D. in.   angle	F	-
	material   comment		-
Remarks:			



- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s (compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary
- SG = Suction gas cooling normally sufficient
- = not applicable in this area



**ASHRAE MBP/HBP**

115V, 60Hz, CSR, fan cooling F<sub>2</sub>

Evap. temp. in °F	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45
Capacity in BTU/h						2758	3135	3525	3936	4378	4860	5390	5979	6634	7367	8185	9098
Power cons. in W						657	692	727	761	794	828	860	893	925	958	990	1022
Current cons. in A						8.88	9.12	9.35	9.60	9.84	10.1	10.3	10.6	10.8	11.0	11.3	11.5
EER in BTU/Wh						4.20	4.53	4.85	5.17	5.51	5.87	6.26	6.69	7.17	7.69	8.27	8.90

**ASHRAE MBP/HBP**

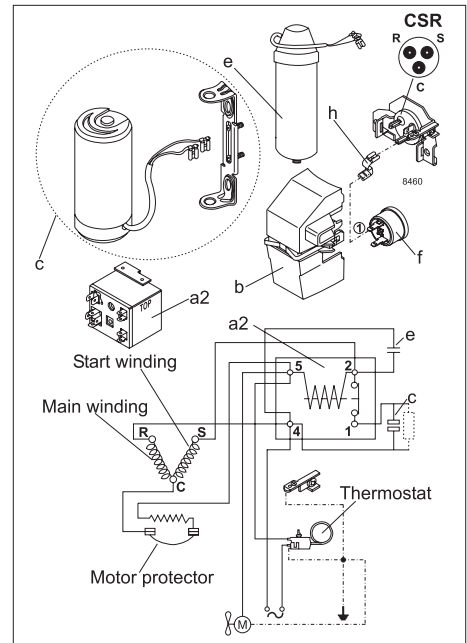
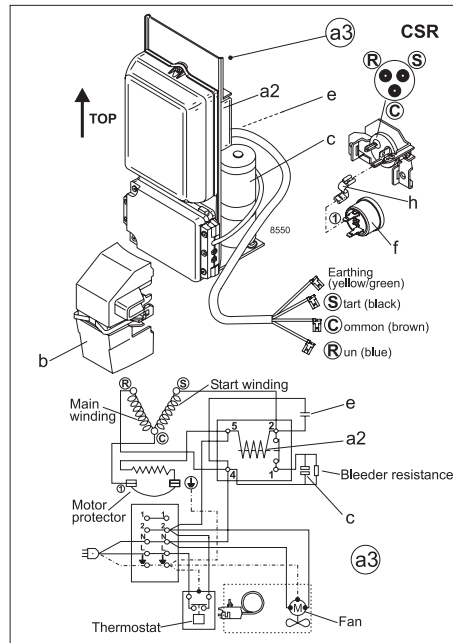
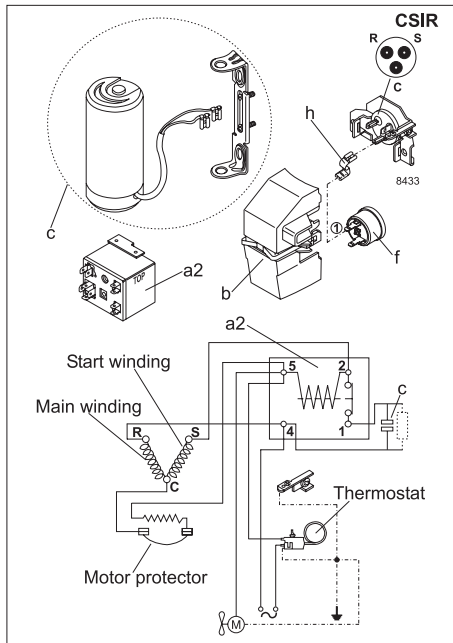
115V, 60Hz, CSIR, fan cooling F<sub>2</sub>

Evap. temp. in °F	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45
Capacity in BTU/h						2678	3054	3443	3854	4295	4775	5302	5884	6529	7248	8047	8936
Power cons. in W						691	729	765	801	837	872	906	940	974	1008	1042	1076
Current cons. in A						9.34	9.59	9.85	10.1	10.4	10.6	10.9	11.1	11.4	11.6	11.9	12.1
EER in BTU/Wh						3.87	4.19	4.50	4.81	5.13	5.48	5.85	6.26	6.70	7.19	7.72	8.30

**ASHRAE LBP**

115V, 60Hz, CSR, fan cooling F<sub>2</sub>

Evap. temp. in °F	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45
Capacity in BTU/h						3087	3510	3948	4410	4907	5449	6046	6710	7450	8277	9202	10236
Power cons. in W						664	699	734	769	803	837	870	903	936	969	1002	1035
Current cons. in A						8.88	9.12	9.35	9.60	9.84	10.1	10.3	10.6	10.8	11.0	11.3	11.5
EER in BTU/Wh						4.65	5.02	5.38	5.73	6.11	6.51	6.95	7.43	7.96	8.54	9.18	9.89



Accessories for	SC18MNX	Figure	Code number
Starting device assembly			
CSR	23.6 in. cable length	a3	117-7045
CSIR	23.6 in. cable length		117-7053
Starting device components			
Starting relay	1/4 in. spade connect.	a2	117-7441
Start. capacitor 410 µF	1/4 in. spade connect.	c	117U5043
Run capacitor 23.5 µF	1/4 in. spade connect.	e	117-7114
Cover		b	117U1021 *)
Protector		f	117U3188 *)
Protector holder		h	117U0439 *)
*) Remarks: Cover, protector, protector holder parts of compressor			

Test conditions	ASHRAE MBP/HBP	ASHRAE LBP
Condensing temp.	130°F	130°F
Ambient temperature	90°F	90°F
Suction gas temp.	95°F	90°F
Liquid temperature	115°F	90°F

Mounting accessories		Code number
Bolt joint for one comp.	Ø: 5/8 in.	118-1917
Bolt joint in quantities	Ø: 5/8 in.	118-1918
Snap-on in quantities	Ø: 5/8 in.	118-1919

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